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PATENT CLAIMS

1. A flat antenna (A) for receiving digital or analogue broadcasts from a satellite (S),
comprising at least one layer of individual receiver elements, the elements in the
5 layer being interconnected by means of conductive paths in such a manner that the
signal's phase shift due to the position of the elements in the layer is compensated
for by means of length variations in the conductive paths, where the individual
receiver elements are connected in pairs to a pair collector point, the pairs are
connected into sub-arrays with a sub-array collector point, the sub-arrays are
10 connected into arrays with an array collector point, and the arrays are connected
into groups with a group collector point,
c h a r a c t e r i z e d i n that the conductive paths between elements (5,8), pairs
(14), sub-arrays (15), arrays (17) and/or groups (19) comprise one or more of the
following elements: straight segments extending in a first direction, straight
15 segments extending in a second direction perpendicular to the first direction,
straight segments extending on a third direction inclined or angled in relation to the
first and the second directions and bent segments or compensation leads, wherein
the bent segments comprise two or more polygonal sections and/or one or more
curvilinear sections.
- 20 2. Antenna according to claim 1,
c h a r a c t e r i z e d i n that at least one sub-array (15) in an array (17) is
connected to the array collector (18) by means of at least one straight segment
extending in the third direction.
- 25 3. Antenna according to any of the preceding claims,
c h a r a c t e r i z e d i n that at least one array (17) in a group (19) is connected to
a group collector (20) by means of a bent segment.
4. Antenna according to any of the preceding claims,
c h a r a c t e r i z e d i n that it comprises layers of elements (8) for receiving
30 horizontally polarised signals and layers of elements (5) for receiving vertically
polarised signals.
5. Antenna according to one of the preceding claims,
c h a r a c t e r i z e d i n that it comprises reflector elements (R) situated in an
angle to the antenna plane, where this angle is preferably 90 degrees.
- 35 6. Antenna according to claim 5,
c h a r a c t e r i z e d i n that it is equipped with individual reflectors (R) for the

individual antenna elements (5,8) or with a strip of reflectors (R) assigned to several elements.

7. Antenna according to claim 5 or 6,
c h a r a c t e r i z e d i n that the reflector elements or individual reflectors (R)
5 comprise perforations (P) where these perforations to facilitate transmission of the
incoming waves from the satellite (S) reaching the elements (5, 8) without being
blocked by the reflectors or reflector elements (R).
8. Antenna according to one of the preceding claims,
c h a r a c t e r i z e d i n that each conductive element layer (4,7) comprises a
10 collector element (C) for signals from all the antenna groups (19), and the collector
element (C) consists of a conductive path with an air gap (G), where path length is
different on both sides of the gap (G), and a receiving head for receiving signals
from the gaps.
9. Antenna according to one of the preceding claims,
15 c h a r a c t e r i z e d i n that it comprises a sheet (1) with holes (2), the width of
the holes (2) being between 12mm and 15mm for the frequency band of operation.
10. An antenna according to one of the preceding claims,
c h a r a c t e r i z e d i n that it is in the form of a strip.
11. A flat antenna for receiving digital or analogue signals from a satellite,
20 c h a r a c t e r i z e d i n that it consists of a layer of elements that are assembled as
illustrated in the drawings.